

PART 1 - GENERAL

- .1 Contractor to engage an electrician holding a provincial Certificate or Qualification to meet electrical requirements of project.

1.1 RELATED REQUIREMENTS

- .1 Section 07 46 13 - Preformed Metal Siding
- .2 Section 07 27 00.02 - Air Barriers – Performance
- .3 Section 07 92 00 - Joint Sealants

1.2 REFERENCES

- .1 American National Standards Institute (ANSI)
 - .1 ANSI C82.1-04, Lamp Ballasts-Line Frequency Fluorescent Lamp Ballast.
 - .2 ANSI C82.4-02(R2007), Ballasts for High-Intensity-Discharge and Low-Pressure Sodium Lamps Multi Supply Type.
- .2 American National Standards Institute/Institute of Electrical and Electronics Engineers (ANSI/IEEE)
 - .1 ANSI/IEEE C62.41-1991, Recommended Practice for Surge Voltages in Low-Voltage AC Power Circuits.
- .3 ASTM International Inc.
 - .1 ASTM F 1137-00(2006), Standard Specification for Phosphate/Oil and Phosphate/Organic Corrosion Protective Coatings for Fasteners.
- .4 Canadian Standards Association (CSA International)
- .5 ICES-005-07, Radio Frequency Lighting Devices.
- .6 Underwriters' Laboratories of Canada (ULC)

1.3 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Provide submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data:
 - .1 Provide manufacturer's printed product literature, specifications and datasheet and include product characteristics, performance criteria, physical size, finish and limitations.
 - .2 Provide complete photometric data prepared by independent testing laboratory for luminaires where specified, for approval review by Departmental Representative.
 - .3 Photometric data to include: VCP Table where applicable spacing criterion.
- .3 Samples:
 - .1 Provide samples as indicated. Install wall sample fixtures, design wall in mock-up ceiling. Do not include cost of mock-up in

project price. Locate mock-up on site.

- .4 Quality assurance submittals: provide following in accordance with Section 01 11 55.
 - .1 Manufacturer's instructions: provide manufacturer's written installation instructions and special handling criteria, installation sequence, and cleaning procedures.

1.4 QUALITY ASSURANCE

- .1 Work to be done under current Standard and Codes by an electrician holding a provincial Certificate or Qualification.

1.5 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements.
- .2 Deliver materials to site in original factory packaging, labeled with manufacturer's name, address.
- .3 Packaging Waste Management: remove for reuse and return by manufacturer of pallets crates padding and packaging materials in accordance with Section 01 74 19 - Construction/Demolition Waste Management and Disposal.
- .4 Divert unused metal materials from landfill to metal recycling facility.
- .5 Disposal and recycling of fluorescent lamps as per local regulations.
- .6 Disposal of old PCB filled ballasts.

PART 2 - PRODUCTS

2.1 LAMPS

- .1 LED providing 1200 lumens for recessed downlights, 2400 lumens for wall packs
- .2 L70 expectancy of 70,000 hours
- .3 Colour Temperature: 5000K +/-200K

2.3 FINISHES

- .1 Light fixture finish and construction to meet ULC listings and CSA certifications related to exterior installation.
- 2 Housing colour to be black.

2.4 LUMINAIRES

- .1 LED recessed potlights for saline environment. As indicated on Electrical drawing E1
 - .1 UL 1598 Wet location list.
 - .2 Stainless steel housing. 150 mm diameter.
 - .3 Polycarbonate lens cover.

- .2 LED downlighting wallpacks for saline environment. As indicated on Electrical drawing E1
 - .1 UL 1598 Wet location list.
 - .2 120 degree beam angle
 - .3 Polycarbonate lens cover.

PART 3 - EXECUTION

3.1 INSTALLATION

- .1 Locate and install luminaires as indicated on drawings.
- .2 Provide adequate support to suit soffit and wall system.

3.2 WIRING

- .1 Connect luminaires to lighting circuits:
 - .1 Install EMT conduit for all replaced luminaires
- .2 Install wiring in EMT conduit for additional luminaire. Connect to circuit as indicated by Departmental Representative, or Airport Maintenance Specialist.
 - .1 Minimum wiring to be #12 AWG
 - .2 All new wiring is to have 600V RW90XLPE insulation.

3.4 LUMINAIRE ALIGNMENT

- .1 Align luminaires mounted in continuous rows to form straight uninterrupted line.
- .2 Align luminaires mounted individually parallel or perpendicular to building grid lines.

3.5 CLEANING

- .1 Clean in accordance with Section 01 74 11 - Cleaning.
 - .1 Remove surplus materials, excess materials, rubbish, tools and equipment.
- .2 Waste Management: separate waste materials for reuse and recycling in accordance with Section 01 74 19 - Construction/Demolition Waste Management and Disposal.

END OF SECTION